BRUHAT BANGALORE MAHANAGARA PALIKE

Name of Work: Improvements to Cross roads at Muneshwara Layout in ward no 03

Sl No	Description of work	Unit	No	Length m	Breadth m	Depth m	Quantity	Rate in Rs	Amount in Rs
1	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No-27,I No-5.33)								
	For Drain Desilt	Sqm							
	Muneshwara layout								
	10th Main rd		2	48.00	1.50		144.00		
	11th Main rd		2	54.00	1.50		162.00		
	12th Main rd		2	55.00	1.50		165.00		
							471.00		
	Deduct for missing/damaged						94.20		
							376.80		
	consider 30%						113.04	111.30	12581.35
	Basic Rate Rs.=	105.00							
	Add 6% A.W Rs. =	6.30							
	Total Rate Rs. =	111.30							
2	KSRRB 300 - Excavation for road, drains and similar works KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 (P.No-143, I.No-19.1)								
		Cum							
	For Drain Desilt								
	Muneshwara layout								
	10th Main rd		2	48.00	0.40	0.30	11.52		
	11th Main rd		2	54.00	0.40	0.30	12.96		
	12th Main rd		2	55.00	0.40	0.30	13.20		
							37.68	215.28	8111.75
	Basic Rate Rs.=	130.00							
	Add 6% A.W Rs. =	7.80							
	Sub Total =	137.80							
	8Km Lead, Loading and Unloading =(2*1.28*8)+57	77.48							
	Total Rate Rs. =	215.28							
3	Providing granite slabs of selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., complete. 7.5 cms thick (P.No.27,I.No.5.31.1 of PW, P&IWTD SR 2018-19)								
	For drain cover slab	Sqm							
	missing/damaged from item no.01						88.80		
							94.20	742	65296
	Basic Rate Rs.=	700.00					94.20	700.00	65940.00
	Add 6% A.W Rs. =	42.00							
	Total Rate Rs. =	742.00							
4	KSRRB M300-14. Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 8km lead (I No-19.14,P No-143)								
	For Asphalt Road	Cum							
	Muneshwara layout								
	10th Main rd		1	48.00	6.50	0.30	93.60		
	11th Main rd		1	54.00	5.80	0.30	93.96		
	12th Main rd		1	55.00	5.50	0.25	75.63		

	5th cross rd								
	cross rd-1		1	18.00	5.00	0.25	22.50		
	cross rd-2		1	19.00	5.20	0.25	24.70		
	cross rd-3		1	23.00	5.70	0.25	32.78		
	Cross rd A Bad Reaches		1	80.00	1.00	0.20	16.00		
	Cross rd B Bad Reaches		1	115.00	1.00	0.20	23.00		
	Berm cutting								
	Muneshwara layout								
	10th Main rd		2	48.00	1.00	0.20	19.20		
	11th Main rd		2	54.00	1.00	0.20	21.60		
	12th Main rd		2	55.00	1.00	0.20	22.00		
	Basic Rate Rs.=	41.00					**444.96**	63.94	**28450.74**
	8Km Lead, Loading and Unloading =(2*1.28*8)	20.48							
	Add 6% A.W Rs. =	2.46							
	Total Rate Rs. =	**63.94**							
5	KSRRB 300-58. Compaction of original ground by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications.MORTH / Chapter 3(P.No-147,I No-19.64)								
	For Asphalt Road	Sqm							
	Muneshwara layout								
	10th Main rd		1	48.00	6.50		312.00		
	11th Main rd		1	54.00	5.80		313.20		
	12th Main rd		1	55.00	5.50		302.50		
	5th cross rd								
	cross rd-1		1	18.00	5.00		90.00		
	cross rd-2		1	19.00	5.20		98.80		
	cross rd-3		1	23.00	5.70		131.10		
	Basic Rate Rs.=	6.00					**1247.60**	6.36	**7934.74**
	Add 6% A.W Rs. =	0.36							
	Total Rate Rs. =	**6.36**							
6	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications Clause 401 of MORTH V Revision.(I No-20.5,P No-153)								
	For Asphalt Road	Cum							
	Muneshwara layout								
	10th Main rd		1	48.00	6.50	0.15	46.80		
	11th Main rd		1	54.00	5.80	0.15	46.98		
	12th Main rd		1	55.00	5.50	0.15	45.38		
	5th cross rd								
	cross rd-1		1	18.00	5.00	0.15	13.50		
	cross rd-2		1	19.00	5.20	0.15	14.82		
	cross rd-3		1	23.00	5.70	0.15	19.67		
	Cross rd A Bad Reaches		1	80.00	1.00	0.15	12.00		
	Cross rd B Bad Reaches		1	115.00	1.00	0.15	17.25		
	Basic Rate Rs.=	1882.00					**216.39**	1994.92	**431680.74**
	Add 6% A.W Rs. =	112.92							
	Total Rate Rs. =	**1994.92**							
7	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications(P.No-155,I No-20.18)								
	For Asphalt Road	Cum							

	Muneshwara layout								
	10th Main rd		1	48.00	6.50	0.200	62.40		
	11th Main rd		1	54.00	5.80	0.200	62.64		
	12th Main rd		1	55.00	5.50	0.200	60.50		
	5th cross rd								
	cross rd-1		1	18.00	5.00	0.200	18.00		
	cross rd-2		1	19.00	5.20	0.200	19.76		
	cross rd-3		1	23.00	5.70	0.200	26.22		
	Cross rd A Bad Reaches		1	80.00	1.00	0.200	16.00		
	Cross rd B Bad Reaches		1	115.00	1.00	0.200	23.00		
							288.52	2001.28	**577409.31**
	Basic Rate Rs.=	1888.00							
	Add 6% A.W Rs. =	113.28							
	Total Rate Rs. =	**2001.28**							
8	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications Clause 502 of MORTH V revision(P.No-158,I No-21.6)								
	For Asphalt Road	Sqm							
	Muneshwara layout								
	10th Main rd		1	48.00	6.50		312.00		
	11th Main rd		1	54.00	5.80		313.20		
	12th Main rd		1	55.00	5.50		302.50		
	5th cross rd								
	cross rd-1		1	18.00	5.00		90.00		
	cross rd-2		1	19.00	5.20		98.80		
	cross rd-3		1	23.00	5.70		131.10		
	Cross rd A Bad Reaches		1	80.00	1.00		80.00		
	Cross rd B Bad Reaches		1	115.00	1.00		115.00		
							1442.60	28.62	**41287.21**
	Basic Rate Rs.=	27.00							
	Add 6% A.W Rs. =	1.62							
	Total Rate Rs. =	**28.62**							
9	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 505 of MORTH V revisionusing 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No-160,I No-21.17.6)								
	For Asphalt Road	Cum							
	Muneshwara layout								
	10th Main rd		1	48.00	6.50	0.05	15.60		
	11th Main rd		1	54.00	5.80	0.05	15.66		
	12th Main rd		1	55.00	5.50	0.05	15.13		
	5th cross rd								
	cross rd-1		1	18.00	5.00	0.05	4.50		
	cross rd-2		1	19.00	5.20	0.05	4.94		
	cross rd-3		1	23.00	5.70	0.05	6.56		
	Cross rd A Bad Reaches		1	80.00	1.00	0.05	4.00		
	Cross rd B Bad Reaches		1	115.00	1.00	0.05	5.75		
							72.13	6597.44	475873.35
	Basic Rate Rs.=	6224.00							
	Add 6% A.W Rs. =	373.44							
	Total Rate Rs. =	**6597.44**							
10	KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications (P.No-161,I No-21.7)								
	For Asphalt Road	Sqm							

	Muneshwara layout								
	10th Main rd		1	48.00	6.50		312.00		
	11th Main rd		1	54.00	5.80		313.20		
	12th Main rd		1	55.00	5.50		302.50		
	5th cross rd								
	cross rd-1		1	18.00	5.00		90.00		
	cross rd-2		1	19.00	5.20		98.80		
	cross rd-3		1	23.00	5.70		131.10		
	Cross rd A Bad Reaches		1	80.00	5.00		400.00		
	Cross rd B Bad Reaches		1	115.00	5.00		575.00		
							2222.60	12.72	**28271.47**
	Basic Rate Rs.=	12.00							
	Add 6% A.W Rs. =	0.72							
	Total Rate Rs. =	**12.72**							
11	Providing and laying bituminous concrete 40mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015. using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4 % of modified bituminus binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic)(P.No-171,I No-21.78.12)								
	For Asphalt Road	Cum							
	Muneshwara layout								
	10th Main rd		1	48.00	6.50	0.03	9.36		
	11th Main rd		1	54.00	5.80	0.03	9.40		
	12th Main rd		1	55.00	5.50	0.03	9.08		
	5th cross rd								
	cross rd-1		1	18.00	5.00	0.03	2.70		
	cross rd-2		1	19.00	5.20	0.03	2.96		
	cross rd-3		1	23.00	5.70	0.03	3.93		
	Cross rd A Bad Reaches		1	80.00	5.00	0.03	12.00		
	Cross rd B Bad Reaches		1	115.00	5.00	0.03	17.25		
							66.68	7753.90	**517014.54**
	Basic Rate Rs.=	7315.00							
	Add 6% A.W Rs. =	438.90							
	Total Rate Rs. =	**7753.90**							
12	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803(P.No-182,I No-24.15)								
	For Asphalt Road	Sqm							
	Muneshwara layout								
	10th Main rd		2	48.00	0.10		9.60		
	11th Main rd		2	54.00	0.10		10.80		
	12th Main rd		2	55.00	0.10		11.00		
	5th cross rd								
	cross rd-1		2	18.00	0.10		3.60		
	cross rd-2		2	19.00	0.10		3.80		
	cross rd-3		2	23.00	0.10		4.60		
	Cross rd A Bad Reaches		2	80.00	0.10		16.00		
	Cross rd B Bad Reaches		2	115.00	0.10		23.00		
							82.40	454.74	**37470.58**
	Basic Rate Rs.=	429.00							
	Add 6% A.W Rs. =	25.74							
	Total Rate Rs. =	**454.74**							

	Add GST @ 12%						Sub Total 1 Rs.	2232025.78
								267843.09
	Miscellaneous & Rounding off						Sub Total 2 Rs.	2499868.87
								131.13
							Total Rs.	2500000.00

CERTIFICATE:

1 The work spot has been inspected by me and the work is found to be necessary.
2 The estimate is prepared as per PW, P&IWTD S.R Bangalore circle for the year 2018-2019.
3 The Provisions made in the estimate are quite necessary and adequate.
4 The area comes with in the BBMP limits.

Assistant Engineer
Ward 03
BBMP

Assistant Executive Engineer
Yelahanka New Town Sub Division
BBMP

Executive Engineer
Yelahanka Division
BBMP

Administrative Approval
Accorded For Rs 25.00 lakhs only
Head of A/C... P 3726
CER NO :... 193 ... Dt... 27.03.2020

TA CE (YNK)

Technical Sanction
Accorded For Rs 25.00 lakhs only
Head of A/C... P 3726
CER NO :... 347 ... Dt... 27.03.2020

TA CE (YNK)

MUNESHWARA LAYOUT

Hanuman Condiments
Akkayamma Temple
ದೇವಸ್ಥಾನ
Sri Muneshwara Swami Temple
Safelog Technologies
6th Cross Rd
Cross rd-2 L-19m
Cross rd-1 L-18m
5th cross rd
Cross rd-3 L-23m
Presidency University
Boys Hostel Attur Layout
Bethel Christian Fellowship
Sri Balaji Bike Zone & Automobiles
ಶ್ರೀ ಬಾಲಾಜಿ
ಬೈಕ್ ವಲಯದ &...
Attur Main road
Band
Akshaya Nursing Home
ಅಕ್ಷಯ
ನರ್ಸಿಂಗ್...
Sri Sai Garden Layout
ಶ್ರೀ ಸಾಯಿ
ಗಾರ್ಡನ್...
3rd Cross Rd
Dazzling Kids
Balaji Super Bazaar
ಬಾಲಾಜಿ
ಸೂಪರ್ ಬಜಾರ್
SRI MANJ
CREDIT CO
Maatru Water supplier
Sri Muneshwara Temple
12th Main rd L-55m
11th Main rd L-54m
10th Main rd L-48m
Punith Duniya
7th Cross Rd
6th Cross St
5th Cross Rd
Sri Jade Muneshwara Swami Temple
Sri Gururaja Paper Bag & Pro...s
Veerasagara Main road
Veerasagara Main Rd
Deprocon Controls
Ambabhavani Temple
ASPHALT ROAD

CLIENT: BRUHAT BANGALORE MAHANAGARA PALIKE	CONSULTANT:- Silicon Consulting Engineers #S1317, 4th CROSS BEL 2nd STAGE BHARATH NAGAR BANGALORE 560 091. E-mail siliconcivilengineers@gmail.com	Assitante Engineer	Assitante Executive Engineer	Executive Engineer	Improvements to Cross roads at Muneshwara Layout in ward no 03

Proposed typical Cross section of Asphalt Road - Ward Road

AE-3